AFTER FINAL

This Amendment After Final Rejection is submitted in response to the outstanding final Office Action, dated January 7, 2005. The present application was filed on September 22, 2000 with claims 1 through 54. Claims 45-54 were withdrawn in the Amendment and Response to Office Action dated August 12, 2004. Claims 1 through 44 are presently pending in the above-identified patent application. In this response, Applicants propose to amend claims 5, 6, 14, 22, 28, 29, 37, and 44. No additional fee is due.

This amendment is submitted pursuant to 37 CFR §1.116 and should be entered. The Amendment places all of the pending claims, i.e., claims 1 through 44, in a form that is believed allowable, and, in any event, in a better form for appeal. It is believed that examination of the pending claims as amended, which are consistent with the previous record herein, will not place any substantial burden on the Examiner.

In the Office Action, the Examiner objected to claims 5-6, 14, 22, 28-29, 37, and 44 due to indicated informalities. The Examiner rejected claims 1-44 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner also rejected claims 1-2, 4, 15-17, 19, 23-25, 27, 38-39, and 41 under 35 U.S.C. §102(a) as being anticipated by Larzon, Lars-Ake et al., "Efficient Use of Wireless Bandwidth for Multimedia Applications," Mobile Multimedia Communications, 1999 IEEE International Workshop, November 15-17, 1999, 187-193, and rejected claims 8-12, 20, 31-35, and 42 under 35 U.S.C. §103(a) as being unpatentable over Larzon et al. in view of Dillon et al. (United States Patent Number 6,430,233). The Examiner indicated that claims 3, 5-7, 13-14, 18, 21-22, 26, 28-30, 36-37, 40, and 43-44 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Formal Objections

Claims 5-6, 14, 22, 28-29, 37, and 44 were objected to due to indicated informalities. Regarding claims 5-6, 14, 28-29, and 37, the Examiner asserts that "the FEC decoder" lacks antecedent basis. Regarding claims 22 and 44, the Examiner asserts that "an FEC decoder" should be changed to –a FEC decoder--. Regarding claims 28 and 29, the Examiner asserts that "said error indicator" lacks antecedent basis.

Claims 5-6, 14, 22, 28-29, 37, and 44 have been amended to correct the antecedent basis of the cited claims. Applicants believe that the amendments address the Examiner's concerns and respectfully request that the objections to the cited claims be withdrawn.

Section 112 Rejections

Claims 1-44 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner asserts that the specification does not describe nor support the steps of receiving and forwarding payload error information at the time the application was filed.

Applicants note that the disclosure teaches that "the present invention *forwards each packet, as well as the* ***channel frame error information****, to a given application.*" (Page 3, lines 33-34; emphasis added.) The present disclosure also teaches that, "at the receiver, the CUDP protocol *forwards the* ***frame error information****, as well as the packet data, to the application layer.*" (Page 4, lines 9-10; emphasis added.) United States Patent Application Number 09/668,243 entitled "Radio Link Protocol (RLP)/Point-to-Point Protocol (PPP) Design for Wireless Multimedia Packet Networks that Passes Corrupted Data and Error Location Information Among OSI Layers," incorporated by reference in the present disclosure, teaches that:

> at the Radio Link Protocol (RLP) layer, the PPP/IP packets are further segmented into multiple ***data*** *frames* with separate RLP headers, to accomplish physical layer transmissions. At the receiving host, the RLP layer receives ***data*** *frames* from the physical layer, where data frames can be corrupted by *channel errors*, and evaluates the validity of the data frames.
> (Page 2, lines 7-12; emphasis added.)

Thus, the *channel frame error information* disclosed in the present disclosure refers to information regarding the channel errors that occur in data frames, wherein the data frames are created from, for example, PPP/IP packets. A person of ordinary skill in the art would recognize that such data frames are payload to the RLP layer and that, therefore, *payload error information* is equivalent to *channel frame error information*. Thus, the present disclosure describes the step of receiving and forwarding payload error information (page 3, lines 33-34).

Independent Claims 1, 16, 24, 38, 45, 49, 53 and 54

Independent claims 1, 16, 24, and 38 under 35 U.S.C. §102(a) as being anticipated by Larzon et al.

Regarding claims 1, 16, 24, and 38, the Examiner asserts that Larzon discloses a transport protocol capable of delivering partially damaged payload to codecs that permit this, while protecting vital header fields with a checksum (forwarding error information with multimedia data to a higher layer).

Applicant notes that Larzon discloses that the policy achieved by UDP Lite is to "provide *data payloads unchecksummed* to the application while checksumming headers." The present invention is directed to forwarding error information related to the payload, where each packet, as well as the channel frame error information, is forwarded to a given application. The protocol of the present invention further assists the FEC decoding process by forwarding the locations of corrupted frames to the FEC decoder. Independent claims 1, 16, 24, and 38, as amended, require forwarding *payload* error information with said multimedia data to a higher layer.

Thus, Larzon et al. do not disclose or suggest "forwarding payload error information with said multimedia data to a higher layer," as required by independent claims 1, 16, 24, and 38.

Additional Cited References

Dillon et al. was also cited by the Examiner for its disclosure that MDS codes are used in applications data. Applicants note that Dillon is directed to a satellite data receiver which permits the user of a conventional satellite television system to receive data services, other than televised signals, without upgrading their outdoor unit or requiring an installer to be let in to the consumer's home. Dillon does not address the issue of forwarding payload error information with multimedia data to a higher network layer.

Thus, Dillon et al. do not disclose or suggest "forwarding payload error information with said multimedia data to a higher layer," as required by independent claims 1, 16, 24, and 38.

Dependent Claims 2-15, 17-23, 25-37, 39-44, 46-48 and 50-52

Dependent claims 2, 4, 15, 17, 19, 23, 25, 27, 39, and 41 under 35 U.S.C. §102(a) as being anticipated by Larzon et al. and rejected claims 8-12, 20, 31-35, and 42 under 35 U.S.C. §103(a) as being unpatentable over Larzon et al. in view of Dillon et al.

Claims 2-15, 17-23, 25-37, 39-44, 46-48 and 50-52 are dependent on claims 1, 16, 24, 38, 45, and 49, respectively, and are therefore patentably distinguished over Larzon et al. and Dillon et al. (alone or in any combination) because of their dependency from amended independent claims 1, 16, 24, 38, 45, and 49 for the reasons set forth above, as well as other elements these claims add in combination to their base claim. The Examiner has already indicated that claims 3, 5-7, 13-14, 18, 21-22, 26, 28-30, 36-37, 40, and 43-44 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

Date: March 2, 2005

Kevin M. Mason
Attorney for Applicant(s)
Reg. No. 36,597
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06824
(203) 255-6560